

What is Claimed is:

1. A method of electronic bargaining for sale of goods, comprising:
  - receiving, by a server for an electronic bargaining web site, information about goods for sale and a seller's price range for sale of the goods, wherein the seller's price range is defined by highest and lowest selling prices;
  - posting the goods for sale on the web site with a proposed selling price, wherein the proposed selling price is the highest selling price, wherein the web site allows a buyer connecting to the web site using a computer to initiate a bargaining process for the sale of the goods posted on the web site, and wherein the web site allows the buyer either to accept the proposed selling price or to input a buyer's desired price;
  - receiving, by the server, the buyer's desired price;
  - determining whether the buyer's desired price falls within the seller's price range including the highest and lowest selling prices;
  - formulating, by the server, a seller's adjusted price if the buyer's desired price is below the lowest selling price, wherein the seller's adjusted price is lower than the proposed selling price and within the price range;
  - transmitting to the buyer's computer the seller's adjusted price so that the seller's adjusted price is displayed on the buyer's computer, wherein the web site allows the buyer to accept the seller's adjusted price or to input a buyer's adjusted price;
  - receiving, by the server, the buyer's adjusted price for further bargaining;
  - determining whether the buyer's adjusted price falls within the seller's price range including the highest and lowest selling prices;
  - formulating, by the server, a seller's further adjusted price if the buyer's adjusted price is below the lowest selling price, wherein the seller's further adjusted price is lower than the seller's adjusted price and within the price range; and
  - transmitting to the buyer's computer the seller's further adjusted price so that the seller's further adjusted price is displayed on the buyer's computer, wherein the web site allows the buyer to accept the seller's further adjusted price or to input a buyer's further adjusted price.

2. A method of electronic bargaining for sale of goods, comprising:
  - receiving, by a server for an electronic bargaining web site, a buyer's desired price of goods posted on the web site;
  - determining whether the buyer's desired price falls within a predetermined price range of the goods, the price range including highest and lowest selling prices thereof; and
  - if the buyer's desired price is below the lowest selling price, transmitting to the buyer a seller's adjusted price that is lower than the highest selling price and within the price range.
3. The method of Claim 2, wherein the seller's adjusted price is provided by a seller of the goods in reply to the buyer's desired price.
4. The method of Claim 2, wherein the seller's adjusted price is provided by a seller of the goods prior to the receipt of the buyer's desired price.
5. The method of Claim 2, wherein the seller's adjusted price is automatically formulated by the server.
6. The method of Claim 2, wherein the server formulates the seller's adjusted price substantially immediately upon receipt of the buyer's desired price.
7. The method of Claim 2, further comprising receiving, by the server, a buyer's desired quantity along with the buyer's desired price.
8. The method of Claim 7, wherein the seller's adjusted price is formulated such that the seller's adjusted price decreases when the buyer's desired quantity increases.
9. The method of Claim 2, wherein the predetermined price range is provided by a seller.
10. The method of Claim 2, further comprising receiving from the buyer a buyer's acceptance to the seller's adjusted price.
11. The method of Claim 2, further comprising transmitting to the buyer an acceptance to the buyer's desired price if the buyer's desired price falls within the price range.
12. The method of Claim 2, further comprising repeating the method with respect to the same buyer.

13. The method of Claim 12, wherein the method is repeated to a fixed number of times.

14. The method of Claim 13, wherein after the fixed number of repetitions, the method further comprises:

formulating a server's proposed sale price based on the price range and the buyer's desired price in each repetition; and

transmitting the server's proposed sale price to the buyer for acceptance.

15. The method of Claim 14, further comprising receiving an acceptance of the buyer to the server's proposed sale price.

16. The method of Claim 14, further comprising transmitting the server's proposed sale price to a seller of the goods for acceptance.

17. The method of Claim 16, further comprising receiving an acceptance of the seller to the server's proposed sale price.

18. The method of Claim 14, wherein the proposed sale price is lower than or equal to the lowest selling price.

19. The method of Claim 14, wherein the proposed sale price is higher than the lowest selling price.

20. The method of Claim 2, further comprising receiving from the buyer either a buyer's adjusted price or a buyer's acceptance to the seller's adjusted price.

21. The method of Claim 20, further comprising transmitting the buyer's acceptance to the seller upon receipt thereof.

22. The method of Claim 20, further comprising, upon receipt of the buyer's adjusted price, determining whether the buyer's adjusted price falls within the price range including the highest and lowest selling prices.

23. The method of Claim 22, further comprising:

in case the buyer's adjusted price falls within the price range, transmitting to the buyer an acceptance to the buyer's adjusted price; and

in case the buyer's adjusted price is below the lowest selling price, transmitting to the buyer seller's another adjusted price that is lower than the seller's adjusted price and within the price range.

24. The method of Claim 2, wherein if the buyer's desired price falls within the price range, the method further comprises transmitting, by the seller, a seller's acceptance to the buyer.

25. The method of Claim 24, wherein the seller's acceptance is substantially immediately transmitted by the server.

26. The method of Claim 24, further comprising receiving, by the server, a buyer's confirmation to the seller's acceptance.

27. The method of Claim 26, further comprising processing for payment of the accepted price.

28. The method of Claim 26, further comprising transmitting the buyer's confirmation to a seller of the goods.

29. A system for electronic bargaining for sale of goods, comprising:  
means for storing information identifying goods for sale and a price range defined by highest and lowest selling prices of the goods;  
means for receiving a desired price of goods for sale;  
means for determining whether the desired price falls within the price range including the highest and lowest selling prices;  
means for formulating an adjusted selling price that is lower than the highest selling price and within the price range; and  
means for transmitting the adjusted selling price.

30. A method for electronic bargaining for sale of goods, comprising:  
connecting, by a buyer, to an electronic bargaining web site on a server;  
locating, by the buyer, goods to buy and a selling price of the goods posted on the web site;  
transmitting, from the buyer, to the server a buyer's desired price for the goods;  
receiving, by the buyer, either a seller's acceptance to the buyer's desired price or a seller's adjusted price for further bargaining; and  
in case of receipt of the seller's adjusted price, transmitting, from the buyer, to the server either a buyer's acceptance to the seller's adjusted price or a buyer's adjusted price for further bargaining.

31. The method of Claim 30, wherein the server automatically formulates and transmits the seller's acceptance to the buyer when the buyer's desired price is within a predetermined price range for acceptance.

32. The method of Claim 30, wherein the seller's acceptance is received by the buyer substantially immediately after the buyer's transmitting the buyer's desired price.

33. The method of Claim 30, wherein the seller's adjusted price is automatically formulated by the server such that the seller's adjusted price is higher than the buyer's desired price and within a predetermined price range provided by the seller to the server.

34. The method of Claim 33, wherein the seller's adjusted price is received by the buyer substantially immediately after the buyer's transmitting the buyer's desired price.

35. The method of Claim 30, wherein the seller's adjusted price is originated from the seller.

36. The method of Claim 30, wherein the seller is a person who has registered for electronic bargaining of the goods by providing information about the goods and a price.

37. The method of Claim 30, wherein the server comprises a plurality of components, one or more of which are located in different locations.

38. The method of Claim 30, further comprising receiving, by the buyer, from the server a server's proposed sale price in case of no acceptance by either the buyer or seller.

39. A method for electronic bargaining, comprising:

causing, by a buyer, to transmit information identifying the buyer's desired goods to a server for an electronic bargaining web site, wherein at least part of the information for identifying the buyer's desired goods is posted on the electronic bargaining web site;

receiving, by the buyer, a seller's desired price for selling the goods by a seller, wherein the buyer receives the seller's desired price through the web site;

transmitting, from the buyer, to the server either a buyer's acceptance to the seller's desired price or a buyer's adjusted buying price; and

receiving, by the buyer, either a seller's acceptance to the buyer's adjusted buying price or a seller's adjusted price.

40. The method of Claim 39, further comprising transmitting, from the buyer, to the server a buyer's price range for accepting a seller's desired price falling within the price range.

41. The method of Claim 39, further comprising transmitting, from the buyer, to the server a quantity of the goods that the buyer desires to buy.

42. The method of Claim 39, wherein the seller is a person connecting to the server of the electronic bargaining web site and participating in the electronic bargaining to sell the buyer's desired goods to the buyer.

43. The method of Claim 39, wherein the buyer causes to transmit the information from another web site posting the buyer's desired goods.

44. The method of Claim 43, wherein the transmission of the information comprises running a software configured to retrieve information from a web site and to initiate transmission of at least part of the retrieved information to the electronic bargaining web site.

45. The method of Claim 43, wherein the other web site further discloses a price for the buyer's desired goods.

46. The method of Claim 43, further comprising transmitting, from the buyer or the server of the electronic bargaining web site, to a server of the other web site a notice that the buyer's desired goods are posted for bargaining at the electronic bargaining web site.

47. The method of Claim 43, further comprising transmitting, from the buyer or the server of the electronic bargaining web site, to a person who posted the buyer's desired goods on the other web site a notice that the buyer's desired goods are posted for bargaining at the electronic bargaining web site.

48. The method of Claim 39, wherein the server comprises a plurality of components, one or more of which are located in different locations.

49. A method for electronic bargaining for sale of goods, comprising:  
connecting, by a seller, to an electronic bargaining web site on a server;  
transmitting, by the seller, to the server information for registering for an electronic sale of goods, wherein the information comprises identification of the goods and a seller's desired price for the goods, wherein at least part of the information is posted on the electronic bargaining web site;

receiving, by the seller, a buyer's desired price; and

transmitting, from the seller, to the server either a seller's adjusted price for further bargaining or a seller's acceptance to the buyer's desired price.

50. The method of Claim 49, wherein the buyer is a person connecting to the electronic bargaining web site and participating in the electronic bargaining to buy the goods from the seller.

51. The method of Claim 49, wherein the server comprises a plurality of components, one or more of which are located in different locations.

52. The method of Claim 49, further comprising receiving, by the seller, either a buyer's adjusted price for further bargaining or a buyer's acceptance to the seller's adjusted price.

53. The method of Claim 52, further comprising receiving, by the seller, a server's proposed sale price in case of no acceptance by either the buyer or seller.

54. The method of Claim 53, further comprising receiving, by the seller, a buyer's acceptance to the server's proposed sale price.

55. The method of Claim 53, further comprising transmitting, from the seller, a seller's acceptance to the server's proposed sale price.

56. The method of Claim 52, further comprising transmitting, from the seller, to the server either seller's another adjusted price for further bargaining or a seller's acceptance to the buyer's adjusted price.

57. The method of Claim 56, further comprising receiving by the seller from the server either buyer's another adjusted price or a buyer's acceptance to the seller's other adjusted price.

58. The method of Claim 49, wherein the information further comprises a quantity of the goods for sale.

59. A method for an electronic sale of goods, comprising:

connecting, by a seller, to an electronic bargaining web site on a server;

transmitting, from the seller, to the server information for registering for an electronic sale of goods, wherein the information comprises identification of goods for sale and a price range for electronic bargaining, wherein at least part of the information is to be posted on the electronic bargaining web site; and

receiving, by the seller, from the server an acceptance by a buyer to a price , which is formulated by the server with use of the price range and a price proposed by the buyer.

60. The method of Claim 59, wherein the server-formulated price is within the price range transmitted by the seller.

61. The method of Claim 59, wherein the server formulated price is below the lower limit of the price range.

62. The method of Claim 61, further comprising transmitting, by the seller, to the server a seller's acceptance to the server formulated price.

63. The method of Claim 59, wherein the buyer is a person connecting to the electronic bargaining web site and participating in the electronic bargaining to buy the goods.

64. The method of Claim 59, wherein the server comprises a plurality of components, one or more of which are located in different locations.

65. An electronic commerce system for negotiating a price on a network, comprising:

- a negotiation management server for operating an electronic shopping mall which is connected to first and second clients through a network and in which a trade price is decided by 1 to 1 price negotiations between the first and second clients, and controlling a series of functions for the 1 to 1 price negotiations between the first and second clients;

- a price negotiation engine controlled by the negotiation management server and including a registration module for receiving and registering data on goods to be sold or purchased and data on a negotiation environment inputted from the first clients, a negotiation progress module for selecting any of the second clients which wishes to participate in the price negotiations and then displaying a negotiation window through which negotiation data proposing the quantity and price of the goods in the price negotiations are inputted so that the price negotiations between the first and second clients is progressed, and a calculation module for receiving the negotiation data proposing the quantity and price of the goods from the first and second clients through the negotiation window, calculating a fair negotiation unit price based on the received negotiation data and the negotiation environment data,



and calculating and outputting the degree of negotiation intention as the degree of access to the price negotiations by comparing and analyzing the fair negotiation unit price and the negotiation data; and

a database server controlled by the negotiation management server for storing member information on the first and second clients subscribing as members, registered goods information on the goods data and the negotiation environment data of the registered goods to be sold or purchased from the first clients, and negotiation management information on negotiation history, trade details and approval details in the price negotiations between the first and second clients.

66. The electronic commerce system as claimed in Claim 65, wherein the database server comprises:

a member database for the member information consisting of member basic data including IDs, passwords and basic personalities received through member subscription from the first and second clients and member trade data including progress situations, trade details, approval details, credit levels and electronic signatures for each member for the price negotiations between the first and second clients;

a registered goods database for the registered goods information consisting of goods data including a goods kind, a goods name, an open market price for the goods and goods presentation and negotiation environment data including a registration quantity, a desired highest unit price, a desired lowest unit price, a negotiation way and a negotiation term for the goods data; and

a negotiation management database for the negotiation management information consisting of history for each negotiations, price negotiation results, and trade details, approval details and delivery details according to the price negotiation results in the price negotiations between the first and second clients.

67. The electronic commerce system as claimed in Claim 65, wherein when the goods to be sold or purchased by the first clients are selected through a goods search of a price comparison service server, the registration module of the price negotiation engine further includes

an automatic registration module for receiving goods data on the selected goods from the price comparison service server, classifying the received data into a goods kind, a goods name, an open market price for the goods and goods presentation, and automatically inputting the classified data into a goods registration screen.

68. The electronic commerce system as claimed in Claim 65, wherein when plug-in applications for a web browser using a proxy technology are provided to the first clients and the first clients, which have been provided with the plug-in applications, request registration of goods to be sold or purchased by use of the plug-in applications while surfing the Internet shopping mall, the registration module of the price negotiation engine further includes:

a proxy automatic registration module for extracting data on goods requested to be registered from the Internet shopping mall, classifying the extracted data into a goods kind, a goods name, an open market price for the goods and goods presentation, and automatically inputting the classified data into a goods registration screen.

69. The electronic commerce system as claimed in Claim 65, wherein when the negotiation data proposing the quantity and price of the goods are inputted from the second clients, the negotiation progress module of the price negotiation engine further includes:

an automatic negotiation module for displaying the inputted negotiation data and the corresponding degree of negotiation intention, and automatically generating and displaying the negotiation data on the quantity and price of the goods corresponding to the degree of negotiation intention of the second clients in place of the negotiation data proposed by the first clients.

70. An electronic commerce method for deciding a trade price through price negotiations between first and second clients connected via a network in an electronic commerce system, comprising:

a member authentication step of confirming members when the first and second clients are connected via the network;

after the member authentication step, when goods data for goods to be sold and purchased and negotiation environment data as negotiation materials are inputted

from the first clients, a registration step of registering the inputted goods data and negotiation environment data as trade goods into a database server;

after the registration step, when the second clients select the registered goods in order to participate in the price negotiations, a display step of displaying a negotiation window for allowing the first and second clients to input negotiation data proposing the quantity and price of the goods;

after the display step, when the negotiation data proposing the quantity and price of the goods are inputted from the first and second clients, a price negotiation step of calculating a fair agreement unit price based the inputted negotiation data and the negotiation environment data, comparing and analyzing the calculated fair agreement unit price and the negotiation data, and displaying the degree of negotiation intention as the degree of access to the price negotiations;

after the price negotiation step, a negotiation progress determination step of, when it is confirmed that the negotiation data proposed by the other party are accepted by the first or second clients, deciding a trade price based on the accepted negotiation data and then ending the price negotiations, and when it is confirmed that the negotiation data proposed by the other party are not accepted by the first or second clients, confirming a predetermined negotiation term or the number of proposals of the negotiation data and determining whether the price negotiations is further progressed or not;

after the negotiation progress determination step, when it is confirmed that the trade price is not decided for the ended price negotiations, a price negotiation arbitration step of proposing a fair agreement arbitration condition for the quantity and price of the goods generated based on price negotiation history and negotiation environment data to the first and second clients and acquiring a confirmation as to whether the agreement arbitration condition is accepted or not by the first and second clients; and

when the trade price is decided for the price negotiations ended after the negotiation progress determination step, or when the proposed agreement arbitration condition is accepted by the first and second clients after the price negotiation arbitration step, a trade accomplishment step of confirming the decided trade price or

the trade details and the approval details for the agreement arbitration conditions and then registering them into the database server.

71. The electronic commerce method as claimed in Claim 70, wherein the registration step comprises the steps of:

- selecting the goods to be sold or purchased by the first clients through a goods search of a price comparison service server;

- receiving goods data on the selected goods from the price comparison service server, classifying the received data into a goods kind, a goods name, an open market price for the goods and goods presentation, and automatically inputting the classified data; and

- receiving and registering negotiation environment data including a registration quantity, a desired highest unit price, a desired lowest unit price, a negotiation way, and a negotiation term for the goods data from the first clients.

72. The electronic commerce method as claimed in Claim 70, wherein the registration step comprises the steps of:

- confirming goods to be sold or purchased and requesting goods registration by use of plug-in applications while surfing the Internet shopping mall through web browsers of the first clients provided with the plug-in applications for web browsers using a proxy technology;

- extracting data on goods requested to be registered from the Internet shopping mall, classifying the extracted data into a goods kind, a goods name, an open market price for the goods and goods presentation, and automatically inputting the classified data; and

- receiving negotiation environment data including a registration quantity, a desired highest unit price, a desired lowest unit price, a negotiation way, and a negotiation term for the goods data from the first clients, and registering the goods.

73. The electronic commerce method as claimed in Claim 72, wherein after the goods registration step, the registration step further comprises a goods registration notification step of automatically forwarding an E-mail telling the goods registration completion to the Internet shopping mall so that the persons concerned in the Internet shopping mall can participate in the price negotiations.

74. The electronic commerce method as claimed in Claim 70, wherein the price negotiation step comprises the steps of:

when the negotiation data proposing the quantity and price of the goods to the other party from the first or second clients are inputted, calculating a fair agreement unit price based on the inputted negotiation data and the negotiation environment data; and

calculating the degree of negotiation intention as the degree of access to the price negotiations by comparing and analyzing the calculated fair agreement unit price and the negotiation data, and displaying the negotiation data and the degree of negotiation intention through a negotiation window.

75. The electronic commerce method as claimed in Claim 70, wherein the price negotiation step comprises the steps of:

when the negotiation data proposing the quantity and price of the goods to the first clients from the second clients are inputted, calculating a fair agreement unit price based on the inputted negotiation data and the negotiation environment data;

calculating the degree of negotiation intention as the degree of access to the price negotiations by comparing and analyzing the calculated fair agreement unit price and the negotiation data, and displaying the negotiation data and the degree of negotiation intention of the second clients through a negotiation window; and

generating the negotiation data corresponding to the degree of negotiation intention instead of the price negotiations of the first clients and automatically displaying the generated negotiation data and the corresponding degree of negotiation intention.

76. The electronic commerce method as claimed in Claim 75, wherein after the automatic display step, when the second clients accept the automatically displayed negotiation data, the price negotiation step further comprises the step of forwarding E-mails or text messages telling trade details for the accepted negotiation data to the first clients and acquiring a confirmation as to whether the accepted negotiation data are accepted or not by the first clients through a reply function of the forwarded E-mails or text messages.

77. The electronic commerce method as claimed in Claim 75, wherein the negotiation data and the degree of negotiation intention of the first clients and the negotiation

data and the degree of negotiation intention of the second clients are simultaneously displayed on the negotiation windows of the first and second clients in real time.

78. The electronic commerce method as claimed in Claim 70, wherein the negotiation progress determination step comprises the steps of:

when it is confirmed that the negotiation data proposed by the other party are accepted by the first or second clients, deciding a trade price based on the accepted negotiation data and then ending the price negotiations, and when it is confirmed that the negotiation data proposed by the other party are not accepted by the first or second clients, confirming a predetermined negotiation term;

when the predetermined negotiation term is ended, ending the price negotiations, and when the predetermined negotiation term is not ended, confirming the number of proposals of negotiation data of the first and second clients; and

when the number of proposals of negotiation data reaches a limited number, ending the price negotiations, and when the number of proposals of negotiation data does not reach the limited number, continuing to progress the price negotiations between the first and second clients.

79. The electronic commerce method as claimed in Claim 70, wherein the price negotiation arbitration step comprises the steps of:

when the trade price is not decided for the ended price negotiations, calculating a fair agreement arbitration condition for the quantity and price of the goods based on the price negotiation history and the negotiation environment data; and

proposing the calculated agreement arbitration condition to the first and second clients and acquiring a confirmation as to whether the proposed agreement arbitration condition is accepted or not by the first and second clients.

80. The electronic commerce method as claimed in Claim 70, wherein the confirmation of the approval details in the trade accomplishment step is performed through a signature confirmation step of registering electronic signature data for each member inputted at the time of member registration from the first and second clients and identifying a signatory by comparing the registered electronic signature data with an electronic signature

received at the time of approval of a credit card for the purpose of security of approval of the credit card.

81. The electronic commerce method as claimed in Claim 70, wherein when the second clients input the negotiation data including a goods delivery term, a quality guaranteed term, returns conditions, payment means, or the number of the recommended, the inputted negotiation data are reflected on calculation of the fair agreement unit price.

82. The electronic commerce method as claimed in Claim 81, further comprising, after the trade accomplishment step, the step of forwarding advertise-purposed E-mails allowing direct purchase and approval or direct participation in the price negotiations without any log-in.